APPENDIX B – OPERABLE UNIT 3 STATEMENT OF WORK

Statement of Work for implementation of the Operable Unit 3 (OU3) Remedial Design and Remedial Action, pursuant to the Consent Decree entered in <u>United States v. Pechiney Plastic Packaging</u>, Inc., (PPPI), 09-cv-5692 and <u>United States v. Bristol-Myers Squibb Co., et al.</u>, 13-cv-5798.

I. WORK TO BE PERFORMED

This Statement of Work (SOW) shall mean the statement of work for implementation of the remedy selected in the September 30, 2016 Record of Decision (ROD) issued by the United States Environmental Protection Agency (EPA) for OU3 of the Pohatcong Valley Groundwater Contamination Superfund Site (Site) located in Warren County, New Jersey. This SOW is incorporated into the Consent Decree and is an enforceable part of the Consent Decree.

The Primary Settling Defendant shall finance and perform the Work (defined in the Consent Decree), in accordance with the Consent Decree, the ROD, and this SOW, including all terms, conditions and schedules set forth herein or developed and approved hereunder.

The OU3 Work consists of design, construction, operations and maintenance (O&M), and associated activities related to the implementation of the remedy selected in the OU3 ROD. The major components of this remedy are as follows:

- The implementation of deep soil vapor extraction (SVE) and/or thermal treatment to address deep soil contamination underlying the former American National Can (ANC) building;
- Long-term operation and maintenance of the existing shallow SVE and sub-slab depressurization (SSD) systems within the former ANC building;
- Long-term groundwater and indoor air monitoring will be performed over time to assess the remedy's effectiveness; and
- Institutional controls, including the existing deed notice, will remain in effect at the former ANC property and will be amended to reflect the components of the Selected Remedy for OU3 that will be implemented at the former ANC property. The institutional controls periodically will be verified as remaining in effect as part of the long-term monitoring effort.

The objectives of the Work are to:

- 1. Reduce contaminant mass in the vadose-zone soil to minimize the impact to groundwater quality;
- 2. Reduce contaminant mass in the vadose-zone soil to minimize the potential humanhealth risks from vapor intrusion; and
- 3. Mitigate impacts to public health resulting from existing, or potential, soil vapor intrusion into buildings.

II. PERFORMANCE STANDARDS

Performance Standards are the cleanup standards and other measures which are required to be met in order to achieve the cleanup goals and other objectives of the Remedial Action (RA) selected in the ROD.

To achieve these objectives, remediation goals for contaminated soil and indoor air at the Site were identified. These objectives shall be met through implementation of the remedy selected in the ROD. The ROD established a Site-specific remediation goal of 1 part per million (ppm) for trichloroethylene (TCE) in the vadose-zone soil. A soil cleanup value of 1 ppm for TCE was determined to be protective of groundwater and indoor air at the Site.

Primary Settling Defendant shall accomplish these objectives using the principles of EPA Region 2's *Clean and Green Policy*, dated March 11, 2010. This policy may be found at: http://epa.gov/region2/superfund/green_remediation/policy.html. Primary Settling Defendant's compliance with the Clean and Green Policy shall be ultimately reflected in the EPA-approved Remedial Design ("RD") Report.

The selected remedy shall be designed and constructed to achieve compliance with the Performance Standards set forth in the RA Objectives section of the ROD. The remedy shall also be designed in accordance with the OU3 SOW and other requirements as set forth in the OU3 ROD and the Consent Decree.

III. PROJECT SUPERVISION/MANAGEMENT

A. SUPERVISING CONTRACTOR

All aspects of the OU3 Work to be performed by the Primary Settling Defendant pursuant to the Consent Decree shall meet all requirements of applicable federal, state and local laws and be performed under the direction and supervision of a qualified licensed professional engineering firm (hereinafter, Supervising Contractor).

Primary Settling Defendant has identified, and EPA has approved, Ramboll Environ US Corporation (Ramboll Environ) as the Supervising Contractor. All plans and specifications shall be prepared under the supervision of, and signed/certified by, a licensed New Jersey professional engineer. With respect to any proposed contractor, Primary Settling Defendant shall demonstrate that the proposed contractor has a Quality System that complies with the Uniform Federal Policy for Implementing Quality Systems (UFP-QS), (EPA/505/F-03/001, March 2005), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). Selection of a new Supervising Contractor shall be subject to approval by EPA in accordance with Section XII. of the Consent Decree.

B. PROJECT COORDINATOR

EPA approves Roy Duckett as Primary Settling Defendant's Project Coordinator and Bruce Kennington as Alternate Project Coordinator. If Primary Settling Defendant intends to change its Project Coordinator or Alternate Project Coordinator, it will notify EPA 10 (ten) days (hereinafter "Days" as defined in the Consent Decree) prior to making a change, in writing, of the names, titles, and qualifications of the new Project Coordinator. The proposed Project Coordinator and Alternate Project Coordinator shall be subject to approval by EPA pursuant to Section XII (Project Coordinators) of the Consent Decree.

In addition to Section XXX. of the Consent Decree, Primary Settling Defendant shall not engage the public through any written or verbal communications without prior review and approval from EPA.

IV. PROJECT REPORTS AND CONSTRUCTION MEETINGS

- A. In addition to the other deliverables set forth in the Consent Decree, Primary Settling Defendant shall provide written monthly progress reports to EPA with respect to actions and activities undertaken pursuant to the Consent Decree. The progress reports shall be submitted on or before the tenth day of each month following the effective date of the SOW. Primary Settling Defendant's obligation to submit progress reports continues until EPA gives the Primary Settling Defendant written notice under the terms of the Consent Decree. At a minimum, these progress reports shall include the following:
 - 1. A description of all actions which have been taken toward achieving compliance with the Consent Decree during the prior month;

- 2. A description of any violations of the Consent Decree and other problems encountered during the prior month;
- 3. A description of all corrective actions taken in response to any violations or problems which occurred during the prior month;
- 4. The results of all sampling, test results and other data received or generated by the Primary Settling Defendant during the course of implementing the work during the prior month. Such results shall be validated in accordance with the approved Quality Assurance Project Plan developed in conformity with the SOW. The monthly report shall also identify all plans, reports, and other deliverables required by the Consent Decree completed and submitted during the previous month;
- 5. A description of any modifications to the OU3 Work plans or other schedules that the Primary Settling Defendant has proposed to EPA or that have been approved by EPA, and a description of all plans, actions, and data scheduled for the next eight weeks. The monthly report shall also include a description of all activities undertaken in support of community relations during the previous month and those to be undertaken in the next eight weeks;
- 6. An estimate of the percentage of the Work required by the Consent Decree which has been completed as of the date of the progress report; and
- 7. An identification of all delays encountered or anticipated that may affect the future schedule for performance of the OU3 Work, and all efforts made by the Primary Settling Defendant to mitigate delays or anticipated delays.
- B. During the remedial construction phase of the RA, the Primary Settling Defendant shall participate in weekly construction meetings with representatives from EPA and/or EPA's contractor at the site. At a minimum, the Primary Settling Defendant's Supervising Contractor and their Project Coordinator shall attend the weekly construction meetings. The Supervising Contractor and the Project Coordinator may participate in the weekly meetings by phone unless EPA determines that their physical presence is necessary at particular meetings. If the Project Coordinator is an employee of the Supervising Contractor, only the Project Coordinator needs to attend the weekly construction meetings. At a minimum, these weekly construction meetings shall include, but not be limited to the following:
 - 1. A description of all field activities and field actions which have been taken toward achieving compliance with the Consent Decree during the prior

week;

- 2. A description of all field activities and field actions which are planned for the upcoming week;
- 3. A description of all corrective activities and actions taken in response to any violations or problems which occurred during the prior week; and
- 4. An identification of all delays encountered or anticipated that may affect the future schedule for performance of the Work, and all efforts made by the Primary Settling Defendant to mitigate delays or anticipated delays.

V. RD ACTIVITIES

The Remedial Design (RD) activities to be performed in support of the implementation of the Work include, but are not limited to, the following:

- A. Development of remedial design (RD) work plans, tasks, and schedules for Preliminary RD Investigations, a Preliminary RD Report (30% completion), a Pre-Final RD Report (90% completion), and a Final RD Report (100% completion) (collectively, RD Reports);
- B. Conduct pre-design investigations (PDI) to collect data needed for performance of RD, including, but not limited to vertical and horizontal delineation of contaminated areas to be treated;
- C. Conduct a proposed pilot/treatability study to demonstrate the effectiveness of deep SVE and/or thermal treatment to address deep soil contamination underlying the former ANC building;
- D. Design of a deep soil SVE and/or thermal treatment system to address contaminated soils under the ANC building;
- E. Tasks required for the development of long-term groundwater monitoring to evaluate the effectiveness of the remedial action;
- F. Tasks required for the modification of existing institutional controls, such as amendment to the Deed Notice to incorporate the additional requirements of the OU3 ROD;
- G. Descriptions of any applicable permitting requirements and other regulatory

requirements;

- H. Evaluation of the need for air monitoring during construction activities at the Site and development, if necessary, of plans to ensure that air emissions resulting from construction activities meet applicable or relevant and appropriate air emission requirements; and
- I. Tasks to identify how the RD and the RA will be implemented using the principles in EPA Region 2's *Clean and Green Policy*.

VI. REMEDIAL DESIGN WORK PLAN

Within forty-five (45) days after EPA's issuance of approval of the OU3 SOW, the Primary Settling Defendant shall submit a draft Remedial Design Work Plan (RDWP) for the design of the OU3 RA at the Site (OU3 Remedial Design Work Plan") to EPA for review and approval pursuant to Section VI (Performance of the Work by Primary Settling Defendant) of the Consent Decree.

The OU3 RDWP shall provide for design of the portion of the remedy set forth in the OU3 ROD that is to occur within the geographical boundaries of the Washington Facility, in accordance with the OU3 SOW and for achievement of the Performance Standards and other requirements as set forth in the OU3 ROD, the Consent Decree, and the OU3 SOW.

The OU3 RDWP shall be prepared in accordance with this SOW, the Consent Decree, CERCLA and relevant EPA guidance, including the EPA document entitled *Guidance on Oversight of Remedial Designs and Remedial Actions performed by Potentially Responsible Parties*, (OSWER directive 9355.5-01, EPA/540/g-90-001), dated April 1990, and shall be in conformance, *inter alia*, with the Superfund Remedial Design and Remedial Action Guidance, dated June 1986, and any updates thereto. Upon its approval by EPA, the OU3 RDWP shall be incorporated into and enforceable under the Consent Decree.

The draft OU3 RDWP shall include tasks, work plans, field work and data collection, and schedules for implementation of all remedial design and pre-design tasks identified in this SOW. The RDWP shall also include the anticipated dates and tasks associated with the preparation and submission of all deliverables including the RD Reports and the OU3 Remedial Action Work Plan. The draft RDWP shall include, but not be limited to, the following:

- A. A detailed description of all RD tasks through completion of the 100% Remedial Design Report.
- B. A detailed schedule for all RD activities and a draft schedule for the completion all RA and monitoring activities.
 - 1. The RD schedule shall provide for the completion and submittal to EPA of the Final RD Report (100% completion) within 12 months of EPA's written approval of the completion of the RDWP. The schedule shall be in the form of a task/subtask activity bar chart or critical path method sequence of events.
 - 2. The draft schedule for the RA shall provide for the completion of the construction of the OU3 remedy within 16 months of EPA's approval of the RA Work Plan (RAWP).
 - 3. The plan and schedule for the completion of the Construction Quality Assurance Plan (CQAP), which shall detail the approach to quality assurance during construction activities at the Site.
- C. A description of PDI which includes, but is not limited to, vertical and horizontal delineation of contaminated areas to be treated, and any additional field work required to complete the RD. The purpose of the PDI is to address data gaps by conducting additional field investigations. The PDI section of the RDWP must include:
 - 1. An evaluation and summary of existing data and description of data gaps;
 - 2. A sampling plan including the media to be sampled, contaminants or parameters for which sampling will be conducted, location (areal extent and depths), and number of samples;
 - 3. Cross-Reference to quality assurance/quality control (QA/QC) requirements set forth in the Quality Assurance Project Plan (QAPP) as described in Section VI. F., below.
 - 4. Upon approval of the RDWP, Primary Settling Defendant shall perform PDI activities in conformance with the approved RDWP and within the time frames specified therein. The results will be presented in the 30% Remedial Design Report.

- D. A Pilot/Treatability Study Work Plan (P/TSWP) shall be submitted for EPA approval within the RDWP. A Pilot/Treatability Study shall be performed by the Primary Settling Defendant for the purpose of demonstrating the effectiveness of deep Soil Vapor Extraction (SVE) and/or thermal treatment to address deep soil contamination underlying the former ANC building.
 - 1. The P/TSWP shall be prepared by the Primary Settling Defendant in accordance with EPA's *Guide for Conducting Treatability Studies under CERCLA, Final (Oct. 1992)*, as supplemented for RD by the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995).
 - 2. In accordance with the approved RD Schedule, Primary Settling Defendant shall perform the Pilot/Treatability Study activities in conformance with the P/TSWP approved by EPA and within the timeframes specified therein. The results of the Pilot/Treatability Study will be summarized in the 30% Design Report.
 - 3. Following completion of the Pilot/Treatability Study, Primary Settling Defendant shall submit a Pilot/Treatability Study Evaluation Report for EPA comment. This report must include: a summary of the investigations performed, a summary of investigation results, a summary of validated data (i.e., tables and graphics), data validation reports and laboratory data reports, narrative interpretation of data and results, results of statistical and modeling analyses; photographs documenting work conducted and conclusions and recommendations for RD, including design parameters and criteria.
 - 4. EPA may require Primary Settling Defendant to supplement the Pilot/Treatability Study Evaluation Report and/or perform additional pilot/treatability studies.
- E. A plan for the performance of air monitoring, as necessary, during design activities at the Site to ensure that air emissions resulting from the design activities meet applicable or relevant and appropriate air emission requirements.
- F. Quality Assurance Project Plan
 - 1. Prior to commencement of any monitoring investigations under the Consent Decree, a Quality Assurance/Quality Plan (QAPP) shall be prepared as a component of the RDWP submittal by the Primary Settling Defendant, which is consistent with the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), Parts 1, 2 and 3,

EPA-505-B-04-900A, B and C, March 2005 or newer, and other guidance documents referenced in the aforementioned guidance documents. Activities involving the collection, generation, use and/or reporting of environmental data, design; construction and/or operation of environmental technologies; development and/or use of models; and other activities that need quality assurance or quality control requirements shall incorporate quality assurance, quality control, and chain of custody procedures in accordance with the Uniform Federal Policy for Implementing Quality Systems (UFP-QS), EPA-505-F-03-001, March 2005 or newer, Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), Parts 1, 2 and 3, EPA-505-B-04-900A, B and C, March 2005 or newer, and other guidance documents referenced in the aforementioned guidance documents. The UFP documents may be found at: https://www.epa.gov/fedfac/assuring-quality-federal-cleanups.

- 2. In addition to the above, guidance and procedures that are located in the EPA Region 2 DESA/HWSB website:
 https://www.epa.gov/superfund/region-2-superfund-electronic-data-submission, as well as other Office of Solid Waste and Emergency Response (OSWER) directives and EPA Region 2 policies should be followed, as appropriate. Subsequent amendments to the above, upon notification by EPA to the Primary Settling Defendant of such amendments, shall apply only to procedures conducted after such notification.
- 3. The Primary Settling Defendant will provide electronic submittals of sampling and geologic data in accordance with Region 2 policies, guidelines, and formats. The Region 2 Electronic Data Deliverable (EDD) is a standardized format for all electronic submittals. Electronic submittals of sampling and geologic data will be made in accordance with the project schedule and in conjunction with the submittal of draft reports. EDD reports may not be required for either in-situ or ex-situ soil treatment verification due to homogenization of soils and different locations of soil pre and post backfill. The Primary Settling Defendant is responsible for reviewing and approving any contractor work for consistency with Region 2 EDD requirements. The Region 2 EDD Guidance and Requirements include instruction manuals and data submission and validation files.

The most recent EDD Guidance and Requirements can be found at: https://www.epa.gov/superfund/region-2-superfund-electronic-data-submission. Environmental data, as referred to above, are defined as any

measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from models, and compiled from other sources such as data bases or the literature.

- 4. The QAPP shall also specifically include the following items:
 - a. An explanation of the way(s) the sampling, analysis, testing, and monitoring will produce data for the RD;
 - b. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling; and
 - c. A map depicting sampling locations (to the extent that these can be defined when the QAPP is prepared).
- 5. In order to provide quality assurance and maintain quality control with respect to all samples to be collected, Primary Settling Defendant shall ensure the following:
 - a. Quality assurance and chain-of-custody procedures shall be performed in accordance with standard EPA protocol and guidance, including the guidance provided in the EPA Region 2 Quality Assurance Homepage, and the guidelines set forth in the Consent Decree.
 - b. Once laboratories have been chosen, each laboratory's quality assurance plan (LQAP) should be submitted to EPA for review. In addition, the laboratory should submit to EPA current copies (within the past six months) of laboratory certification provided from either a State or Federal Agency which conducts certification. The certification should be applicable to the matrix/analyses which are to be conducted. If the laboratory does not participate in the Contract Laboratory Program (CLP), they must submit to EPA the results of performance evaluation (PE) samples for the constituents of concern from within the past six months or they must complete PEs for the matrices and analyses to be conducted and results must be submitted with the LQAP.

- c. The laboratory used for analyses of samples must perform all analyses according to accepted EPA methods.
- d. Unless indicated otherwise in the approved QAPP, Primary Settling Defendant will validate up to 100% of the data based on EPA's request.
- e. Submission of the validation package (checklist, report and Form I5 containing the final data) to EPA, to the extent applicable, prepared in accordance with the provisions of Subparagraph g, below.
- f. Assurance that all analytical data that are validated as required by the QAPP are validated according to the latest version of EPA Region 2 data validation Standard Operating Procedures. Region 2 Standard Operating Procedures are available at: https://www.epa.gov/quality/managing-quality-environmental-data-epa-region-2.
- g. Unless indicated otherwise in the QAPP, Primary Settling
 Defendant shall require deliverables equivalent to CLP data
 packages from the laboratory for analytical data. Upon EPA's
 request, Primary Settling Defendant shall submit to EPA the full
 documentation (including raw data) for this analytical data. EPA
 reserves the right to perform an independent data validation, data

validation check, or qualification check on generated data.

- h. Primary Settling Defendant shall insert a provision in its contract(s) with the laboratory used for analyses of samples, which will require granting access to EPA personnel and authorized representatives of the EPA for the purpose of ensuring the accuracy of laboratory results related to the Site.
- i. Document Field Activities The Primary Settling Defendant shall consistently document the quality and validity of field and laboratory data compiled during the Work.

Information gathered under the Consent Decree will be consistently documented and adequately recorded by the Primary Settling Defendant in well maintained field logs and laboratory reports. The method(s) of documentation must be specified in the Work Plan and QAPP. Field logs or dedicated field log-books must be used to document observations, measurements, and significant events that have occurred during field activities. Electronic field record keeping can be used; however, it does not eliminate the requirement for manual record keeping and/or submittals. Measurements or observations may also be recorded by appropriate electronic media and transferred into the report from these media. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

j. Maintain Sample Management and Tracking.

The Primary Settling Defendant shall maintain field reports, sample shipment records, analytical results, and QA/QC reports, in addition, the Primary Settling Defendant shall safeguard chain-of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

- 6. In the event that additional sampling locations, testing, and analyses are required, Primary Settling Defendant shall submit to EPA an addendum to the QAPP for approval by EPA.
- G. A description of how the RD will incorporate the principles found in EPA Region

2's Clean and Green Policy (attached).

H. Access and Other Approvals

The draft RDWP shall include descriptions of known access and other approvals and institutional controls which Primary Settling Defendant will need in order to comply with the Consent Decree, with the exception of those approvals needed from the EPA. This description shall detail how such access and other approvals will be sought, and shall include a schedule for obtaining all necessary access and other approvals including, but not limited to, approval from any off-Site facility accepting waste materials shipped by or on behalf of Primary Settling Defendant. This description shall be updated as appropriate, if subsequent approvals are required.

I. Institutional Controls

The draft RDWP shall include a description of the existing institutional controls. The Primary Settling Defendant shall amend the institutional controls to reflect the components of the OU3 ROD in accordance with the procedures set forth in the Consent Decree.

VII. HEALTH AND SAFETY PLAN

- A. Within 45 days after EPA's issuance of an approval of the SOW, Primary Settling Defendant shall submit to EPA a Health and Safety Plan (HSP) for field design activities that conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29C.F.R. § 1910.120.
- B. The HSP for all activities performed under the Consent Decree shall be developed by Primary Settling Defendant to address the protection of public health and safety and the response to contingencies that could impact public health, safety, and the environment. The HSP shall satisfy the requirements of the Occupational Safety and Health Guidance for Hazardous Waste Site Activities, (June 1990, DHHS NIOSH Publication No. 90-117), and the Occupational Safety and Health Administration, U.S. Department of Labor (OSHA) requirements cited below:
 - 1. All activities performed by or on behalf of Primary Settling Defendant shall be performed in such a manner as to ensure the safety and health of personnel so

engaged. Activities shall be conducted in accordance with all pertinent general industry (29 CFR Part 1910) and construction (29 CFR Part 1926) OSHA standards, as well as any other applicable State and municipal codes or ordinances. All activities by Primary Settling Defendant, its contractors or subcontractors, shall comply with those requirements set forth in OSHA's final rule entitled Hazardous Waste Operations and Emergency Response, 29 CFR 1910.120, Subpart H.

- 2. Since activities required to implement the selected remedy will occur within or in close proximity to an active manufacturing facility, the former ANC building, the HSP must also ensure that all work performed under this CD is performed in such a manner as to ensure the safety and health of all persons working or doing business within the facility. Details of how this requirement will be met must be discussed in the HSP.
- 3. The HSP shall include, at a minimum, the following items:
 - a. Plans showing the location and layout of any temporary facilities to be constructed;
 - b. Description of the known hazards and evaluation of the risks associated with the area of contaminated soils and related potential health impacts;
 - c. List of key personnel and alternates responsible for safety, response operations, and protection of the public;
 - d. Description of levels of protection (based on specified standards) to be used by all personnel;
 - e. Delineation of work, decontamination, and safe zones, and definitions of the movement of zones;
 - f. Description of decontamination procedures for personnel and equipment, and handling and removal of disposable clothing or equipment;
 - g. Incidental emergency procedures which address emergency care for personnel injuries and exposure problems, and containment measures. These procedures shall include evacuation routes, internal and external communications procedures for response to

fire, explosion, or other emergencies, the name of the nearest hospital and the route to that hospital. Local agencies with the capability to respond to emergencies shall be identified and their capabilities shall be described. A description of the procedures for informing the community of these measures shall be outlined;

- h. Description of the personnel medical surveillance program in effect:
- i. Description of monitoring for personnel safety;
- j. Description of routine and special personnel training programs; and
- k. Description of an air monitoring program to determine concentrations of airborne contaminants to which workers (both remediation workers and facility workers), or others may be exposed. The results of work-zone air monitoring may be used as a trigger for implementing air monitoring.

VIII. APPROVAL OF REMEDIAL DESIGN WORK PLAN

Upon approval of the OU3 RDWP by EPA, after a reasonable opportunity for review and comment by the State, and submission of the Health and Safety Plan for all field activities to EPA and the State, Primary Settling Defendant shall implement the OU3 Remedial Design Work Plan. Primary Settling Defendant shall submit to EPA and the State all plans, reports, and other deliverables required under the approved OU3 Remedial Design Work Plan in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans, Reports, and Other Deliverables). Unless otherwise directed by EPA, Primary Settling Defendant shall not commence further OU3 Remedial Design activities at the Site prior to approval of the OU3 Remedial Design Work Plan.

IX. REMEDIAL DESIGN

Primary Settling Defendant shall perform all RD activities in conformance with the RDWP approved by the EPA and within the time frames specified in the RD schedule contained therein.

A. Within sixty (60) days of the completion of all field work and pilot/treatability studies performed, the Primary Settling Defendant shall submit a 30% Remedial Design Report to EPA for review and approval. The RD Reports shall be

submitted to the EPA in accordance with the schedule set forth in the EPA-approved RDWP. Each RD Report (Preliminary 30%, Pre-Final 90% and Final 100%) shall include a discussion of the design criteria and objectives, with emphasis on the capacity and ability to meet design objectives successfully. Each report shall also include the plans and required specifications (in outline form) that have been developed at that point in time, along with a design analysis and project delivery strategy. Preliminary plans, drawings and sketches relevant to the RD must be included. The design analysis shall provide the rationale for the plans and specifications, including results of relevant sampling and testing performed, supporting calculations and documentation of how these plans and specifications will meet the requirements of the ROD and shall provide a discussion of any impacts these findings may have on the RD. In addition to the above, the RD Reports shall include the following items:

- 1. Technical specifications for photographic documentation of the remedial construction work;
- 2. A discussion of the manner in which the RA will achieve the Performance Standards;
- 3. A discussion of the manner in which the RA will comply with EPA Region 2's *Clean and Green Policy*;
- 4. A draft schedule for RA activities and any post remediation soil and groundwater sampling program;
- 5. The draft schedule for the RA shall provide for the construction of the OU3 remedy within 16 months of EPA's approval of the Remedial Action Work Plan (RAWP). The draft schedule for RA and O&M activities may be revised during the remedial process, subject to EPA's approval;
- 6. A report describing those efforts made to secure access and institutional controls and obtain other approvals and the results of those efforts (see Section VI. H. above). Legal descriptions of property or easements to be acquired, if necessary, shall be provided; and
- 7. A plan for implementation of construction and construction oversight.

- B. Additional requirements of Pre-Final/final design submission (90% RD Report) shall include, at a minimum, the following:
 - 1. Final plans and specifications;
 - 2. The Draft Operations and Maintenance ("O&M") Plan which shall be prepared in conformance with the guidance document referred to in XI.D;
 - 3. The CQAP, which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official, independent of the Supervising Contractor, to conduct a quality assurance program during the construction phase of the project;
 - 4. A Field Sampling Plan (directed at measuring the progress towards meeting Performance Standards); and
 - 5. A Contingency Plan.

X. APPROVAL OF RD REPORTS

- A. EPA will review and comment on the Preliminary RD Report (30% completion), and the Pre-Final RD Report (90% completion). Primary Settling Defendant shall make those changes required by EPA's comments in the succeeding design reports (e.g. changes required by comments on the Preliminary RD Report (30% completion) shall be made in the Pre-Final RD Report (90% completion).
- B. Primary Settling Defendant shall submit the Final RD Report (100% completion) to EPA for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Consent Decree. Once approved by EPA, the Final RD Report (100% completion) shall be incorporated into and become an enforceable part of the Consent Decree.

XI. REMEDIAL ACTION

Within thirty (30) days of EPA's approval of the 100% Final Design Report, Primary Settling Defendant shall award a contract for the RA. Primary Settling Defendant shall submit to EPA for approval the name, title, and qualifications of any construction contractor proposed to be used in carrying out work under the Consent

Decree. With respect to any proposed construction contractor, Primary Settling Defendant shall demonstrate that the proposed construction contractor has a quality system that complies with ANSI/ASQC E4-1994, Specifications and Guidelines for Ouality Systems for Environmental Data Collection and Environmental Technology Programs (American National Standard, January 5, 1995), by submitting a copy of the proposed construction contractor's Quality Management Plan ("OMP"). The QMP should be prepared in accordance with the specifications set forth in EPA Requirements for Quality Management Plans (QA/R-2), (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. If EPA disapproves of the selection of any contractor as the construction contractor, Primary Settling Defendant shall submit a list of contractors that would be acceptable to them to EPA within thirty (30) days after receipt of EPA's disapproval of the contractor previously selected. EPA shall thereafter provide written notice of the name(s) of the contractor(s) it approves, if any. Primary Settling Defendant may select any approved contractor from that list and shall notify EPA of the name of the contractor selected within twenty-one (21) days of EPA's designation of approved contractors. If at any time Primary Settling Defendant proposes to change the construction contractor, Primary Settling Defendant shall notify EPA and shall obtain approval from EPA as provided in this paragraph, before the new construction contractor performs any work under this Consent Decree.

- A. Within 90 days after the approval of the final design submission, Primary Settling Defendant shall submit to EPA and the State a work plan for the performance of the OU3 Remedial Action at the Site ("OU3 Remedial Action Work Plan"). The OU3 RAWP shall provide for construction and implementation of the portion of the remedy set forth in the OU3 ROD that is to occur within the geographical boundaries of the Washington Facility in accordance with the OU3 SOW, and achievement of the Performance Standards, in accordance with this Consent Decree, the OU3 ROD, the OU3 SOW, and the design plans and specifications developed in accordance with the OU3 RDWP. Upon its approval by EPA, the OU3 Remedial Action Work Plan shall be incorporated into and enforceable under this Consent Decree. At the same time as it submits the OU3 RAWP, Primary Settling Defendant shall submit to EPA a HSP for field activities required by the OU3 RAWP that conforms to the applicable Occupational Safety and Health Administration and EPA requirements including, but not limited to, 29 C.F.R. 1910.120. The draft RAWP shall include, but is not limited to the following items:
 - 1. A schedule for the completion of the RA and all major tasks therein;
 - 2. method for selection of the contractor (see also §XI., above);

- 3. schedule for developing and submitting other required OU3 RA plans and other deliverables, as necessary;
- 4. A description of all construction-related sampling, analysis, and monitoring to be conducted under the Consent Decree, including a groundwater monitoring plan;
- 5. methods for satisfying permitting requirements;
- 6. methodology for implementing the O&M Plan including a description of long-term groundwater monitoring and indoor-air sampling/remediation;
- 7. methodology for implementing the Contingency Plan;
- 8. tentative formulation of the OU3 Remedial Action team (including but not limited to, the Supervising Contractor), including, as appropriate, a description of the personnel requirements, responsibilities, and duties, including a discussion for training, and lines of authority;
- 9. CQAP (by construction contractor). Discussion of construction quality control, including:
 - i. the methodology for implementing the CQAP including the methods of performing the quality control inspections, when inspections should be made, and what to look for;
 - ii. Control testing procedures, as appropriate, for each specific test. This includes information which authenticates that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards;
 - iii. Procedures for scheduling and managing submittals, including those of subcontractors, off-Site fabricators, suppliers, and purchasing agents;
 - iv. Reporting procedures including frequency of

- reports and report formats; and
- v. Describe procedures for tracking construction deficiencies from identification through corrective action.
- 10. Procedures and plans for the decontamination of equipment and the disposal of contaminated materials.
- 11. The QAPP shall be amended, as necessary. All sampling, analysis, data assessment, and monitoring shall be performed in accordance with the approved QAPP. All testing methods and procedures shall be fully documented and referenced to established methods or standards;
- 12. If applicable, a "Request for Modification of Approved Final RD Report," including any requests for modification of the approved 100% Final RD Report, based on construction methods identified by the contractor(s), or proposed modification of the construction schedule developed under Section IX., above, or any other requests for modification, subject to EPA approval in its sole discretion; and
- 13. Discussion of the methods by which construction operations shall proceed. Discussion shall include the following:
 - a. Timing of and manner in which activities shall be sequenced;
 - b. Preparation of the construction area including security, utilities, decontamination facilities, construction trailers, and equipment storage;
 - c. Coordination of construction activities;
 - d. Maintenance of the construction area during the RA;
 - e. Coordination with local authorities and Owner Settling
 Defendant facility operators regarding contingency
 planning and potential traffic obstruction; and

- f. Entry and access during the construction period(s) and periods of inactivity, including provisions for decontamination, erosion control, and dust control.
- g. A discussion of activities necessary to restore the area and all affected properties to pre-construction conditions after construction.

B. Approval of Remedial Action Work Plan

Upon approval of the OU3 RAWP by EPA after a reasonable opportunity for review and comment by the State, the draft RAWP shall become the RAWP and shall be incorporated into and become an enforceable part of the Consent Decree.

C. Performance of Remedial Action

- 1. Within thirty (30) days after the approval of the RAWP by EPA, Primary Settling Defendant shall initiate the remedial action in accordance with the RAWP and the approved 100% Final RD Report. Primary Settling Defendant shall submit to EPA and the State all reports and other deliverables required under the approved OU3 RAWP in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans, Reports, and Other Deliverables).
- 2. During performance of the remedial action, Primary Settling Defendant may identify and request EPA approval for field changes to the approved RAWP and the approved 100% Final RD Report and RA schedule, as necessary, to complete the work.

D. Operations and Maintenance Plan

1. Concurrent with the RAWP, Primary Settling Defendant shall submit a revised draft O&M Plan to EPA for review and approval pursuant to Section XI (EPA Approval of Plans, Reports and Other Deliverables) of the Consent Decree. The O&M Plan shall be prepared in conformance with EPA guidelines contained in *Operation and Maintenance in the Superfund Program*, OSWER 9200.1 37FS, EPA/540/F-01/004 (May 2001) and Considerations for Preparation of Operation and Maintenance Manuals, EPA 68-01-0341. In addition, the O&M Plan shall be prepared

in accordance with operation and maintenance plans in the "Remedial Design/Remedial Action Handbook," dated June, 1995 (OSWER 9355.0-4A), which includes, but is not limited to, a description of the personnel requirements, responsibilities, and duties, including discussion for training, lines of authority, sampling, analysis, and monitoring conducted under the Consent Decree. The O&M Plan will be developed for the remedy selected in the OU3 ROD, including:

- a. The implementation of deep SVE and/or thermal treatment to address soil contamination underlying the former ANC building;
- b. Long-term operation and maintenance of the existing shallow SVE and SSD systems within the former ANC building;
- c. Long-term groundwater and indoor air monitoring in the OU3 Study Area will be performed over time to assess the remedy's effectiveness:
- d. Institutional controls, including the existing deed notice, will remain in effect at the former ANC property and will be amended to reflect the components of the Selected Remedy for OU3 that will be implemented at the former ANC property. The institutional controls periodically will be verified as remaining in effect as part of the long-term monitoring effort; and
- e. Procedures and plans for post-remediation soil sampling to assure that Performance Standards have been met at the conclusion of soil remediation.
- 2. The O & M Plan shall include, at a minimum, the following:
 - a. An updated or amended QAPP if necessary;
 - b. An updated or amended HSP for O&M activities, if necessary;
 - c. A discussion of potential problems and remedies for such problems;
 - d. A schedule for equipment replacement; and

- e. An O&M and monitoring schedule.
- 3. Proposed modifications of the approved O&M Plan may be submitted to EPA for consideration upon completion of construction or thereafter if Primary Settling Defendant can demonstrate that such considerations would enhance and/or maintain the environmental monitoring programs.
- 4. Once approved by EPA, the Primary Settling Defendant shall implement the activities in the O&M Plan once construction is completed in accordance with the schedule set forth therein. Once approved by EPA, the O&M Plan shall be incorporated into and become an enforceable part of the Consent Decree.

XII. PRE-FINAL AND FINAL INSPECTIONS, REMEDIAL ACTION REPORTS, NOTICE OF CONSTRUCTION COMPLETION

A. Inspections

1. At least fourteen (14) days prior to the completion of construction, Primary Settling Defendant and its contractor(s) shall be available to accompany EPA personnel and/or its representatives on a pre-final inspection. The pre-final inspection shall consist of a walkthrough of the construction areas to determine the completeness of the construction and its consistency with the Final RD Report, the RAWP, the Consent Decree, the OU3 ROD and applicable federal and state laws, rules, and regulations.

Following the pre-final inspection, EPA will either specify the necessary actions to complete the construction phase of the Remedial Action, as appropriate, or determine that construction is complete. If EPA requires actions, Primary Settling Defendant shall undertake such actions according to a schedule proposed by the Primary Settling Defendant and approved by EPA. Within fourteen (14) days after completion of such actions, Primary Settling Defendant and their contractor(s) shall be available to accompany EPA personnel and/or its representatives on an inspection as provided for in the preceding paragraph. Said inspection will be followed by further directions and/or notifications by EPA as provided in this paragraph.

B. Remedial Action Report

- 1. Within sixty (60) days of EPA's determination that construction is complete, Primary Settling Defendant shall submit a OU3 draft RA Report to EPA for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Consent Decree.
- 2. The OU3 draft RA Report shall include the following sections:

a. Introduction

- i. Include a brief description of the location, size, environmental setting, and history of the Site.
- ii. Describe the regulatory and enforcement history of the Site.
- iii. Describe the major findings and results of remedial investigation activities.
- iv. Briefly outline prior removal and remedial activities.

b. Background

- i. Summarize requirements specified in the OU3 ROD regarding contaminated soils and indoor air. Include information on the cleanup goals, institutional controls, monitoring requirements, operation and maintenance requirements, and other parameters applicable to the design, construction, operation, and performance of the RA.
- ii. Provide additional information regarding the basis for determining the cleanup goals, including planned future land use.
- iii. Summarize the RD, including any significant regulatory or technical considerations or events occurring during the preparation of the RD.
- iv. Identify and briefly discuss any ROD amendments, explanation of significant differences, or technical impracticability waivers.

c. Construction Activities

Provide a summary description of the activities undertaken to implement the RA; (e.g., mobilization and site preparatory work, associated site work such as fencing, monitoring, and sampling activities).

d. Chronology of Events

- Provide a tabular summary that lists the major events for the work completed by or on behalf of Primary Settling Defendant to address contamination at the Site, and associated dates of those events, starting with EPA's OU3 ROD issuance.
- ii. Include significant milestones and dates, such as, remedial design submittal and approval; mobilization and construction of the remedy; significant operational, monitoring and sampling events, system modifications, as-built drawings, operational down time, variance or noncompliance situations, and final shutdown or cessation of operations; final sampling and confirmation-of-performance results; required inspections; demobilization; and completion or startup of post-construction operation and maintenance activities.
- iii. An estimate of when cleanup goals are projected to be achieved for indoor air and soil in the OU3 Study Area.
- iv. Include milestones regarding implementation of Institutional Controls.
- e. Performance Standards and Construction Quality Control
 - i. Describe the overall estimated performance of the technology in terms of comparison to cleanup goals.
 - ii. Provide an explanation of the approved construction quality assurance and construction quality control requirements or cite the appropriate reference for this material. Explain any substantial problems or deviations.

iii. Provide an assessment of the performance data quality, including the overall quality of the analytical data, with a brief discussion of QA/QC procedures followed, use of a QAPP, comparison of analytical data quality objectives.

f. Inspection Certificates

- i. Report the results of any inspection, and identify any deficiencies found.
- ii. Briefly describe adherence to health and safety requirements while performing the RA. Explain any substantial problems or deviations.
- iii. Summarize details of institutional controls (e.g., the type of institutional control implemented, who will maintain the control, who will enforce the control).
- iv. This section shall include a certification statement, signed by responsible corporate officials of the Primary Settling Defendant' Supervising Contractor, which states the following:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

g. Continued Maintenance Activities

- i. Describe the general activities for post-construction operation and maintenance activities, including but not limited to: SVE and/or thermal operations, long-term groundwater monitoring, periodic vapor intrusion investigations; continued vapor treatment operations and remediation; site maintenance and closure activities.
- ii. Identify potential problems or concerns with such activities.

iii. Describe future monitoring and/or restoration activities.

h. Contact Information

Provide contact information (names, addresses, phone numbers, and contract/reference data) for the major design and remediation contractors, as applicable.

3. EPA will either, approve the OU3 draft RA Report, thus making it the Final RA Report, require modifications, or require corrective measures to fully and properly implement the RA as per the Consent Decree.

XIII. PERFORMANCE STANDARDS, CONTINGENCY MEASURES AND PETITION TO WAIVE PERFORMANCE STANDARDS

A. As set forth in the OU3 ROD, the Performance Standard for the soil contamination is 1 ppm. The OU3 ROD established a Site-specific remediation goal of 1 ppm for TCE in the soils. This Site-specific remediation goal is protective of both groundwater and indoor air at the Site.

The Primary Settling Defendant shall continue the O&M until the Performance Standard has been achieved, or an alternative Standard has been established and approved by EPA.

- B. If, based on the results of the post-remediation sampling, EPA believes that the Performance Standard specified in the ROD will not be reached, EPA may require the Primary Settling Defendant to implement contingency measures which may include Alternate Remedial Strategies and to submit a Contingency Measures Plan (see Subparagraph C., below) in accordance with the Consent Decree.
- C. A Contingency Measures Plan shall be submitted to EPA by the Primary Settling Defendant within sixty (60) days of receipt of EPA's written determination that contingency measures are appropriate. The Contingency Measures Plan shall include, at a minimum, the following:
 - 1. a discussion of the design and construction of the proposed Contingency Measures, as appropriate;
 - 2. an updated QAPP and HSP for monitoring activities, as necessary; and

- 3. a schedule for the implementation of the Contingency Measures.
- D. EPA will review the Contingency Measures Plan pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Consent Decree.
- E. Primary Settling Defendant shall commence with the implementation of the Contingency Measures Plan within thirty (30) days of receipt of EPA's written approval of the Contingency Measures Plan.
- F. Primary Settling Defendant may petition EPA to waive compliance with one or more of the Performance Standards based on a demonstration that it is technically impracticable, from an engineering perspective, to attain those standards. Primary Settling Defendant shall not submit such a petition until they have implemented the contingency measures for at least 2 years, or a shorter period if approved by EPA in its sole discretion. The Primary Settling Defendant's petition shall include a request for the waiver of the pertinent Performance Standards. If the first petition is rejected, submittal of subsequent petitions must be based on significant new information which could not have been developed at the time the previous petition was submitted. The contents of the petition shall include, at a minimum, the information and analysis described below:
 - 1. A list of Performance Standards for which waivers are being sought;
 - 2. A description of the conceptual model for Site contamination, including geological, hydrogeological and geochemical characterization. The sources, distribution, characterization, migration potential, and quantities of contaminants present at the Site at the time of the petition shall be described. These descriptions shall incorporate pertinent data obtained during design, construction, and implementation of the remedy, as well as other pertinent information obtained during any previous Site characterization efforts;
 - 3. Comprehensive soil, groundwater, and indoor air monitoring data and an evaluation of the soil remedy implemented, along with any other remediation actions performed which enhanced or affected the remedy. The petition should also demonstrate that the remedy has been designed, constructed and operated in a manner which is consistent with the hydrogeologic and contaminant conceptual models of the Site, and that the soil remedy has been modified or enhanced to the extent practicable by the implementation of contingency measures in order to improve its ability to achieve Performance Standards;

- 4. A description of known or suspected soil contaminant sources at the Site. The petition should also describe source control and removal efforts undertaken, and the effectiveness of those efforts;
- 5. An analysis of the performance of the soil remedy which describes the spatial and temporal trends in soil concentrations. The petition shall discuss the factors which influence the remedy's ability to achieve the Performance Standards, and demonstrate how these factors inhibit the remedial system from achieving the Performance Standards;
- 6. The mass of contamination removed from the Site through implementation of the remedy, and an estimate of the mass of contamination remaining;
- 7. A demonstration (including appropriate engineering analysis) that all other technologies which are potentially applicable to the Site cannot achieve Performance Standards in a manner that is practicable from an engineering perspective. This demonstration shall include a prediction of the level of cleanup other technologies can achieve;
- 8. A predictive analysis of the approximate timeframe required to achieve the Performance Standards by continued implementation of the selected remedy (and any alternative remedial strategies, if applicable) using methods appropriate for the data and the Site-specific conditions. Such analysis shall also address the uncertainty inherent in these predictions;
- 9. A description and comparison of alternate remedial strategies proposed to be implemented by the Primary Settling Defendant if a Technical Impracticability waiver is granted. Alternate remedial strategies must achieve a level of cleanup and control that ensures protection of human health and the environment. Alternate remedial strategies may include the establishment of alternate performance standards, and other alternate remedial requirements to ensure protectiveness. Proposed modification to the selected remedy and any additional response actions proposed to be undertaken shall be described by the Primary Settling Defendant in detail. EPA will make the final determination regarding the components of the alternate remedial strategy which shall be implemented at the Site by Primary Settling Defendant;
- 10. A description of additional soil and indoor air monitoring required to verify compliance with the alternative performance standards or alternative remediation requirements. EPA will make the final determination regarding

- the scope of the soil and indoor air monitoring requirements under the alternative remedial strategy; and
- 11. Other information or analysis not included above, but which the Primary Settling Defendant or EPA considers appropriate to making a determination on the petition.
- G. During EPA's review of the petition submitted in accordance with Section XII. F, the Primary Settling Defendant shall continue to implement the O&M Plan until otherwise directed by EPA.
- H. Upon review of all information required by Section XIII. F, EPA will determine (1) whether compliance with any of the Performance Standards shall be waived; (2) what, if any, alternative performance standards or alternate remediation requirements will be established by EPA; and (3) whether modification to any portion of the RA or any additional response actions are required. If EPA denies the petition, the Primary Settling Defendant shall continue to perform O&M unless otherwise directed by EPA.

XIV. NOTICE OF COMPLETION OF OU3 WORK

- A. Notice of Completion of Work
 - Within ninety (90) days after the Primary Settling Defendant concludes 1. that all phases of the Work have been fully performed, the Primary Settling Defendant shall schedule and conduct a pre-certification inspection to be attended by the Primary Settling Defendant and EPA. If, after the pre- certification inspection, the Primary Settling Defendant still believes that the Work, including O&M activities, has been fully performed, the Primary Settling Defendant shall submit a written report by a New Jersey registered professional engineer stating that the Work has been completed in full satisfaction of the requirements of this SOW, the Consent Decree and the ROD. Any modifications to the report required by EPA shall be made pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Consent Decree. If, after review of the written report, EPA, after reasonable opportunity for review and comment by the State, determines that any portion of the Work has not been completed in accordance with this SOW, the Consent Decree or the ROD, EPA will notify the Primary Settling Defendant in writing of the activities that must be undertaken by the Primary Settling Defendant to complete the Work.

2. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion by the Primary Settling Defendant, and after a reasonable opportunity for review and comment by the State, that the Work has been performed in accordance with the Consent Decree, this SOW, and the ROD, and that the Performance Standards have been achieved, EPA will so notify the Primary Settling Defendant in writing.

XV. <u>REFERENCES</u>

- A. The following regulations and guidance documents, among others, may apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA Web pages listed in XV. B. below:
 - 1. A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
 - 2. CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
 - 3. CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
 - 4. Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr.1990).
 - 5. Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).
 - 6. Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).
 - 7. Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).
 - 8. Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Oct. 1992).
 - 9. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
 - 10. Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
 - 11. Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).

- 12. EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- 13. Operation and Maintenance in the Superfund Program, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).
- 14. Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- 15. Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- 16. Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- 17. Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- 18. EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- 19. EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- 20. EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- 21. USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- 22. USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- 23. EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), available at https://www.epa.gov/geospatial/geospatial-policies-and-standards and https://www.epa.gov/geospatial/geospatial-policies-and-standards and https://www.epa.gov/geospatial/geospatial-policies-and-standards and https://www.epa.gov/geospatial/epa-national-geospatial-data-policy.

- 24. Principles for Greener Cleanups (Aug. 2009), available at https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.
- 25. USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- 26. Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- 27. Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).
- 28. Construction Specifications Institute's MasterFormat 2012, available from the Construction Specifications Institute, http://www.csinet.org/masterformat.
- 29. Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).
- 30. Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).
- 31. EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), https://www.epaosc.org/_HealthSafetyManual/manual-index.htm
- 32. Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- B. A more complete list may be found on the following EPA Web pages:
 - Laws, Policy, and Guidance: https://www.epa.gov/superfund/superfund-policy-guidance-and-laws
 - Test Methods Collections: https://www.epa.gov/measurements/collection-methods
- C. For any regulation or guidance referenced in the CD or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of

such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after SDs receive notification from EPA of the modification, amendment, or replacement.